

South Umpqua River Watershed Harvest Plan Environmental Assessment

EA# OR105-08-02

South River Field Office, Roseburg District

“Draft” Finding of No Significant Impact

Date Prepared: June 30, 2008

The South River Field Office, Roseburg District, Bureau of Land Management (BLM), has completed the environmental assessment (EA) for the South Umpqua River Watershed Harvest Plan. The proposed action consists of approximately: 236 acres of regeneration harvest in the General Forest Management Area; 861 acres of commercial thinning and density management in the General Forest Management Area, Connectivity/Diversity Blocks and associated Riparian Reserves; and 448 acres of density management in Late-Successional Reserves.

The location of the proposed timber management units are as follows:

- Regeneration harvest in Section 25, T. 29 S., R. 3 W.; and Sections 3 and 4, T. 30 S., R. 4 W., W.M.;
- Commercial thinning and density management in Sections 8, 17, 18, and 19, T. 29 S., R. 2 W.; Sections 13, 25, 27, 33, and 35, T. 29 S., R. 3 W.; Section 9, T. 30 S., R. 2 W.; and Sections 3, 7, 15, 21, and 23, T. 30 S., R. 3 W., W.M.; and
- Density management in Sections 29, 32 and 33, T. 30 S., R. 4 W.; Section 25, T. 31 S., R. 3 W.; Sections 4, 9, 13, 21, 23, and 30, T. 31 S., R. 4 W.; and Section 25, T. 31 S., R. 5 W., W.M.

The EA analyzed two alternatives in depth, consisting of: Alternative One, No Action; and Alternative Two, the Proposed Action (EA, pp. 5-16). One other alternative suggested in scoping comments were considered but not analyzed in detail (EA, pp. 16-17) because it would not meet the objectives identified in the purpose of the proposed action and would not be consistent with management direction from the Roseburg District *Record of Decision and Resource Management Plan* (ROD/RMP, 1995). Another issue pertaining to analysis of timber harvest on roadless values was not analyzed in depth because, as described in the EA (p. 17), the area has been evaluated on more than one occasion, the most recent being in 2006, and found not to possess wilderness characteristics. Consequently, this is not a subject open to review or requiring further analysis in this environmental assessment.

Unaffected Resources

As addressed in the EA (p. 17), there are no Areas of Environmental Concern; prime or unique farmlands; floodplains; wilderness; waste, solid or hazardous; or Wild and Scenic Rivers proximate to the proposed timber management units. No unique characteristics would be impacted (Council on Environmental Quality (CEQ) Regulations - 40 CFR § 508.27(b)(3)).

Environmental Justice

As described in the EA (p. 17), the proposed action would be consistent with Executive Order 12898 which addresses Environmental Justice. No potential impacts to low-income or minority populations have been identified by the BLM internally or through public involvement. Employment associated with the sales would involve local contractors who engage in similar types of work throughout Douglas County.

Correspondence with local Native American tribal governments has not identified any known unique or special resources in the project areas which provide religious, employment, subsistence or recreation opportunities (EA, p. 17).

Cultural and Historical Resources

As described in the EA (p. 39), cultural clearances were previously conducted on proposed Units 30-4-3A, 3B, 4A and 4B and were determined not to contain any relevant resources.

There are no known cultural resources within any of the remaining units. However, no inventories have been conducted as yet. These are expected to be completed in the spring and summer of 2008.

If resources are discovered during inventory, several options are available to address them. The first would be to avoid the resources by reconfiguring units or relocating roads. If that option is not viable the resources would need to be evaluated to determine their significance. If the resources were not significant, the project could proceed as designed. If the resources were significant, they would need to be avoided or impacts mitigated by recovering a portion of the information that they contain. Development of a mitigation or treatment plan would require consultation with interested Tribal governments and the State Historic Preservation Office to determine appropriate measures to be implemented.

As a consequence, there would be no adverse impacts to scientific, cultural, or historical resources (40 CFR § 1508.27(b)(8)).

Wildlife

Threatened and Endangered Species

As described in the EA (p. 27), the proposed timber management plan would affect 27 **northern spotted owl** home ranges to some degree. As further described in the EA (p. 48-52), these effects would include removal of 236 acres of suitable nesting, roosting and foraging habitat. Eighty of these acres are located within three owl home ranges. Habitat removal would not reduce levels of suitable habitat below viability thresholds in the Coffee Forks and Decaf home ranges. The Stinger Gulch home range is already below the viability threshold, and suitable habitat would be reduced by an additional one percent across the range. It is expected that spotted owls may cease using this home range and attempt to re-establish themselves elsewhere, or suffer mortality from starvation, predation, or exposure in attempting to relocate elsewhere.

Commercial thinning and density management would be applied to approximately 805 acres of unsuitable and dispersal-only habitat located within 25 spotted owl home ranges.

Removal of suppressed and intermediate canopy layers and limited removal of some co-dominant and dominant trees would result in reduced canopy closure and variable stand densities that would reduce vertical and horizontal cover. Spotted owls would be expected to continue to use these stands, however, because post-project canopy cover would exceed 40 percent and the quadratic mean diameter of the stands would exceed 11 inches diameter breast height, figures widely used as a threshold for dispersal function. Use of thinned stands would likely be less than unthinned stands, though, until canopy cover returns to pre-treatment levels in 15-20 years.

No direct effects to spotted owls would be expected in association with the proposed timber harvest for the following reasons.

- Operations, such as road construction and timber harvest that are within the minimum disruption distances would be seasonally restricted from March 1 to July 15th, to ensure that noise disruption would not result in nest abandonment of premature fledging.
- Removal of suitable habitat within 0.25 miles of any known spotted owl site, known owl activity center, or unsurveyed suitable habitat would be seasonally restricted from March 1 to September 30, ensuring that harvest activities would not affect pre-dispersal spotted owl fledglings or attendant adults through habitat modification.

As described in the EA (p. 49 and *Appendix B – Wildlife*), the BLM, U.S. Forest Service, and the U.S. Fish and Wildlife Service conducted a coordinated review of four recent reports on the northern spotted owl. The reports included *Scientific Evaluation of the Status of the Northern Spotted Owl*, *Status and Trends in Demography of Northern Spotted Owls, 1985-2003*, *Northern Spotted Owl Five Year Review: Summary and Evaluation*, and *Northwest Forest Plan – The First Ten Years (1994-2003): Status and trend of northern spotted owl populations and habitat*.

Northern spotted owl populations have continued to decline in the northern portion the species range, despite a high proportion of protected habitat on federal lands in that area. Courtney et al. indicated that population declines over the past 14 years were expected, and concluded that the accelerating downward population trends on some study areas in Washington where little timber harvest has occurred suggests something else is responsible for the decline.

In southern Oregon and northern California, populations have proven to be more stable than in Washington. The fact that northern spotted owl populations were stable in some portions of the range was not expected in the first ten years, given general predictions of continued population declines in the first several decades of Northwest Forest Plan implementation.

Anthony et al. stated that the cause of better demographic performance on southern Oregon and northern California study areas, and greater than expected declines on Washington study areas are unknown. Courtney et al. noted that a range-wide population decline was not unexpected in the first decade, or a reason to doubt the effectiveness of the core Northwest Forest Plan conservation strategy.

Anthony et al. speculated that there were numerous possibilities for the population declines, including competition from barred owls, loss of habitat from wildfire, timber harvest including lag effects from prior harvest, poor weather conditions, and defoliation from insect infestations. Considering the fact that the northern spotted owl is a predator species Anthony et al. also noted the complex relationships of prey abundance on predator populations, and identified declines in prey abundance as another possible reason for declines in survival of northern spotted owl.

As addressed in the EA (p. 50), some researchers have hypothesized that regeneration harvest has facilitated barred owl range expansion, but definitive evidence is lacking. Barred owls can use many types of forested habitats, and given the land ownership pattern, fragmented habitat, and existing barred owl presence in the area it is unlikely that the proposed timber harvest would have any notable effect on barred owl expansion.

As described in the EA (p. 50), spotted owl prey species would also be affected. Species such as brush rabbits, woodrats, and other rodents are primarily associated with early-and mid-seral forest habitat and would likely benefit from the creation of early-seral forest conditions providing a greater abundance of forage. These prey could become available to spotted owls if they move into spotted owl habitat.

As further addressed in the EA (p. 50), habitat for red tree voles and northern flying squirrels would be removed, but it is not expected that this would locally extirpate these species, as both are known to use mid-seral stands which are abundant in the watershed. When considering the proposed regeneration harvest, in-growth of mid-seral stands, and present abundance of late-seral forest habitat on BLM-managed lands in the watershed, available habitat for these species is not expected to change appreciably in the near term and gradually increase in the long term. Since woodrats are the primary prey for spotted owls in the geographic area in which the proposed timber sales are situated, local reductions in red tree vole and flying squirrel populations would have relatively little effect on spotted owl prey selection.

Anthony et al. indicated that there is some evidence that barred owls may have had a negative effect on northern spotted owl survival in the northern portion of the northern spotted owl range, but found little evidence for such effects in Oregon or California. Barred owl competition has not yet been systematically studied to determine whether it is a cause or a symptom of spotted owl population declines. Researchers indicate a need to further examine threats from barred owl competition. Results of ongoing studies have yet to be published, but concern is high enough that barred owl removal has been proposed as part of the most recent spotted owl recovery plan.

Some researchers have hypothesized that regeneration harvest has facilitated barred owl range expansion, but definitive evidence is lacking. Barred owls can use many types of forested habitats, and given the land ownership pattern, fragmented habitat, and existing barred owl presence in the area it is unlikely that the proposed timber harvest would affect barred owl expansion.

Based on the above information, and the current state of knowledge on barred/spotted owl competition and future projected amounts of suitable habitat in the watershed, the proposed timber harvest would not be considered likely to jeopardize the continued existence of the spotted owl.

Bureau Sensitive Species

As described in the EA (p. 53), no direct effects to **bald eagles** would be expected from the proposed timber management action. If nesting bald eagles are found in or near proposed regeneration harvest Units 30-4-3A, 30-4-3B, and 30-4-4A, management direction from the ROD/RMP (p. 49) and conservation measures from the National Bald Eagle Management Guidelines would be applied to assure that nesting habitat is protected and disturbance to nesting eagles is avoided.

Protocol surveys of suitable habitat for the Bureau Sensitive **Chace sideband** snail (*Monadenia chaceana*), **Oregon shoulderband** snail (*Helminthoglypta hertleini*), and **Crater Lake tightcoil snail** (*Pristiloma articum crateris*) would be conducted. As described in the EA (p. 53), if found, inhabited sites would be protected by altering unit configurations, designating buffers, or implementing other measures to provide suitable microclimate, undisturbed substrate, and vegetation or down wood to ensure that viable populations would remain in the occupied stands.

As described in the EA (p. 53), there are no known caves, mines, or rock outcrops in the project areas suitable for roosts, maternity colonies, or hibernacula for **Townsend's big-eared bats**, **Pacific pallid bats**, and **fringed myotis**.

Due to a lack of detailed information on bat populations in the South River Resource Area, in general, and specifically in the area of the proposed timber sales, the effect of the proposed timber harvest on these bat species is difficult to quantify. Bats are capable of traveling widely and quickly, so individuals residing in the proposed timber sale units would likely move to other areas. Direct mortality of individuals that may occupy proposed units is a possibility, however, and displacement of bats could indirectly result in mortality due to increased competition for roost sites and foraging areas. For reasons described in the EA (p. 54), however, it is unlikely to contribute to a need to list them under the Endangered Species Act.

As discussed in the EA (p. 54), there is potential **harlequin duck** nesting habitat adjacent to a 1.4 mile reach of Days Creek that runs between proposed commercial thinning Units 29-3-27A, B, and C. The potential for disturbance to nesting harlequin ducks along this short segment of marginal habitat is low.

As described in the EA (p. 55), although **purple martins** typically nest in more open habitat than the project area, it is possible that there are suitable nest trees and/or snags on the periphery of units or in openings within units that could be cut. The loss of some habitat components in the timber sale areas, however, would not be expected to permanently affect purple martin populations on the Roseburg District or contribute to the need to list the species under the Endangered Species Act.

Botany

As discussed in the EA (p. 35), there are four Special Status botanical vascular plant species whose presence may be considered a reasonable possibility, based upon habitat conditions and surveys conducted in comparable forest habitat elsewhere in the South River Resource Area.

These are the Federally-threatened Kincaid's lupine (*Lupinus sulphureus* ssp. *kincaidii*) and Bureau Sensitive tall bugbane (*Cimicifuga elata*), wayside aster (*Eucephalis vialis*) and Oregon Bensoniella (*Bensoniella oregano.*) Field surveys for these four species and other Special Status vascular plant, bryophyte and lichen species identified in the EA (*Appendix C – Botany*) would be conducted on all of the proposed timber management units. Any populations discovered would be managed to maintain site integrity and population viability, focusing on the habitat characteristics and qualities essential to those species.

As stated in the EA (p. 36), no known sites of Bureau Sensitive fungi species have been documented in the South Umpqua River fifth-field watershed. As further discussed (EA, p. 69), surveys for these species are not considered practical. If fungi are present in the proposed commercial thinning and density management units, loss of the sites could result as a consequence of the removal of substrate and modification of microclimate. Cumulatively, some limited loss of individual fungi and habitat would not be expected to affect long-term viability and persistence of these species because most of these species are dependent on a well distributed network of late-seral forest with moist and shaded conditions. The 236 acres of regeneration harvest proposed in this assessment represents less than one percent of the late-seral forest provided by BLM-managed lands in the watershed, much of which is withdrawn from the timber management base. Density management in Late-Successional Reserves would also accelerate development of late-seral forest providing additional habitat over the longer term.

Fisheries

As described in the EA (p. 30), the Federally-threatened Oregon Coast coho salmon is present in the South Umpqua River fifth-field watershed. Principal streams in proximity to proposed timber management units designated as critical habitat for coho salmon Days Creek and Saint John Creek. These streams are also designated as Essential Fish Habitat for coho salmon.

As described in the EA (p. 61), the potential for timber harvest and hauling to affect fish would be associated with deposition of fine sediment and temporary increases in water turbidity. No such effects to fish in or below the timber sale areas would be expected in association with timber harvest or road construction as there would be no road construction in Riparian Reserves or any yarding through them. As discussed in the EA (p. 63), Riparian Reserves 160 feet in width on intermittent streams and 320 feet in width on fish-bearing streams in or adjacent to regeneration harvest units, and variable width “no-harvest” buffers on streams in or adjacent to commercial thinning and density management units would serve to precipitate and trap any sediment borne by overland run-off.

Indirect effects related to renovation and use of existing roads could arise from the mobilization of fine sediments and its accumulation in stream gravels, which could result in reduced spawning success and egg and alevin survival. Project design criteria described in the EA (p. 64) would minimize this risk such that effects at the project scale would be negligible and cumulative effects at the watershed scale non-existent.

For reasons discussed in the EA (pp. 62-63), it was concluded that the proposed action was not likely to adversely affect Essential Fish Habitat for coho or chinook salmon.

For the reasons described above, there would be no significant adverse impacts to any special status species or critical habitat (40 CFR § 1508.27 (b)(9)).

Noxious Weeds and Non-native Invasive Plants

As discussed in the EA (p. 39), implementation of the District *Integrated Weed Management Program*, in association with project design and contract provisions would minimize risk of introduction or spread of noxious weeds in association with road construction and timber harvest. As described in the EA (p. 16), measures would include mulching disturbed areas and seeding with native grasses to discourage establishment of new weed populations and pressure washing or steam cleaning logging and road construction equipment prior to move-in to avoid introducing weeds from outside the project area. These actions would be consistent with the requirements of the Lacey Act; the Federal Noxious Weed Act of 1974, as amended; and Executive Order 13112, Invasive Species.

Of the ten points listed under 40 CFR § 1508.27(b), the following were considered and found not to apply to the proposed action: significant beneficial or adverse effects; significant effects on public health or safety; effects on the quality of the human environment that are likely to be highly controversial; anticipated cumulatively significant impacts; highly uncertain or unknown risks; and no precedents for future actions with significant effects.

The proposed action conforms with all applicable Federal, State, and local laws and regulations (40 CFR § 1508.27(b)(10)).

Pursuant to Executive Order 13212, the BLM must consider effects of this decision on National Energy Policy. As described in the EA (p. 18), Williams Pipeline Group has proposed construction of a Natural Gas Delivery Pipeline that would cross portions of the South Umpqua River fifth-field watershed. The preferred pipeline route does not pass through any of the proposed timber management units and harvest would not hinder construction and operation of such a facility. As a consequence, no adverse effect on energy resources would be anticipated.

Based on the analysis of potential environmental impacts contained in the EA, I have determined that the proposed action would not have any significant impact on the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969, and an environmental impact statement is not required. I have further determined that the proposed action conforms to management direction from the *Record of Decision and Resource Management Plan* (ROD/RMP) for the Roseburg District, approved by the Oregon/Washington State Director on June 2, 1995.

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Date